Findings From The 1999 Wave Of ETA Attitudinal Tracking Research

Task 56
OMB # 1545-1587

Prepared For:
The Electronic Tax Administration
Of The Internal Revenue Service

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Background, Purpose & Methodology

Background & Purpose

- In late 1997, the IRS commissioned an annual ETA Attitudinal Tracking Study -- a quantitative research effort in which Taxpayer attitudes and behavior are used to segment the Taxpayer universe into distinct, addressable segments.

- The overall purpose of this tracking program is to <u>provide and update information that can be used by ETA in making resource allocation decisions influencing both practitioner information and public acceptance of ETA products/programs</u>.

- The <u>Benchmark</u> Wave (Task 17) was conducted in March 1998. It showed ambivalence toward technology among Taxpayers in general, but clear differences in attitudes by segment.

  - These segments existed along a "tech leader" to "tech follower" continuum that roughly approximated the "innovator" to "laggard" continuum of product adoption theory.

  - Two of the segments seemed to offer more potential for usage of ETA products than the others; with a third segment – attracted by a desire for simple returns and speedy refunds – also offering near-term potential. The survey also showed how to reach each segment media-wise.

Objectives

- The Benchmark Wave was ambitious, covering even ETA product usage and satisfaction issues -- issues which have since been moved to a new Customer Satisfaction & Needs Study. This left the 1999 Wave of the Attitudinal Tracking Study (Task 56) focused mainly on attitudinal issues -- how Taxpayers feel about technology, how they segment on technology issues, and how the segments can be reached.

- The specific objectives of the re-focused study are to:

  - Update IRS understanding of Taxpayer attitudes toward and usage of technology (especially in terms of meeting tax obligations) and attitudes toward life in general.

  - Determine changes in size and composition of the four original ETA Segments.

  - Determine changes in each segment's level of awareness and usage of ETA products.

  - And update the learning gained from the Benchmark about the media habits of the four segments.

Methodology

- Each wave of the study is conducted by telephone during March-to-early-April from RMR's national interviewing facility in Wayne, NJ and consists of…
  - A total of ~1,000 interviews per wave -- allocated across the four IRS regions based on the population of each region.
  - With respondents drawn from a computer-generated random digit dialing (RDD) sample of U.S. households -- which assures that both listed and unlisted telephone households are included in the survey.
  - Interviews are conducted during evening hours (5--9 p.m. in each time zone) and average 15 minutes each.
- To qualify for the study, Taxpayers had to be ages 18-64, employed, and must have filed taxes in the previous tax year (1998 for tax year 1997).
- To assure that the survey is representative of the national Taxpayer audience, a high rate of response is achieved (64.3% in the 1999 wave) and data are weighted to reflect the previous year's tax filing patterns by filing method. (Note: the reported use of filing methods in the survey tends to be naturally close to actual patterns, so weights have only a very minor effect on data.)

Key Findings

Guide To Statistical Notation Used In Key Findings:

Indicates that the 1999 data is significantly higher than the 1998 data at a 95% confidence level (2-tailed test).

☐ Indicates that the 1999 data is significantly lower than the 1998 data at a 95% confidence level (2-tailed test).

Attitudes Toward & Usage Of Technology

Attitudes Toward & Usage Of Technology

- To determine the public's general disposition toward technology and technology products, Taxpayers were asked to rate their level of agreement with technology related statements and to describe their usage of specific technology products. These measures -- along with self-ratings on psychographics -- form the basis of the Taxpayer segmentation covered later.

- 1999 Attitudinal Tracking results showed much of the same public ambivalence toward technology as found in the 1998 study. For example: while there was high claimed *understanding of the World Wide Web* (among 80%) and a general level of *trust in technology* (63%), about two-thirds (61-63%) still feel *kids handle technology better than adults* and say they *cannot keep up with all the new technology* -- and a large minority (38%) still *believe that someday computers will control us*.

- However, there were indications in the 1999 data that there is now greater acceptance of technology than a year ago. Specifically, there were significant increases in the proportion of respondents who *have a good idea of what the World Wide Web is* and who would *rather e-mail friends or family than talk on the phone*. At the same time, there were decreasing proportions who believe that *kids can handle new technology better than adults,* that *when you order by phone, you're really taking a chance,* and that *you should never put financial information on a computer.*
  - These changes in acceptance occurred in all regions, but perhaps more so in the West than elsewhere.

It was in the Western region that we saw the greatest improvement in two technological "leader" attitudes directly related to ETA products -- *wish all government forms could be filed by computer* and *if I could, I would do all my financial dealings by computer.*

Technological Leader Statements

(% Agree)

	TOTAL		NORTHEAST		SOUTHEAST		MIDSTATES		WESTERN	
	ETA Attitude Tracking **1998**	ETA Attitude Tracking **1999**	ETA Attitude Tracking **1998**	ETA Attitude Tracking **1999**	ETA Attitude Tracking **1998**	ETA Attitude Tracking **1999**	ETA Attitude Tracking **1998**	ETA Attitude Tracking **1999**	ETA Attitude Tracking **1998**	ETA Attitude Tracking **1999**
BASE:	1017	1005	307	277	251	285	234	234	225	209
	%	%	%	%	%	%	%	%	%	%
Have a good idea of what the World Wide Web is	72	80	72	76	71	80	70	80	75	83
I think most technology can be trusted	60	63	62	61	61	64	62	65	58	64
I wish all government forms could be filed by computer	54	56	56	56	55	54	50	52	52	63
I'm one of the first to try new technology	48	49	46	48	51	49	51	51	46	48
I'm the kind of person who needs lots of phone technology	45	46	43	40	46	50	47	49	45	44
If I could, I'd do all my financial dealings by computer	37	41	36	41	41	39	35	37	38	45
The easiest way to do banking is by personal computer	32	34	33	30	30	35	31	34	36	37
I'd rather e-mail friends or family than talk on the phone	19	23	17	20	22	26	21	20	18	26

Q1 -- Agree Completely or Agree Somewhat With Each Statement

We also found <u>improvement in all regions in three technological "follower" attitudes related to ETA products</u> -- *one should never put financial information on a computer*, *cannot imagine filing taxes except using paper returns*, and *computers scare me, there's so much that can go wrong*.

Technological Follower Statements

(% Agree)

	TOTAL		**NORTHEAST**		**SOUTHEAST**		**MIDSTATES**		**WESTERN**	
	ETA Attitude Tracking **1998**	ETA Attitude Tracking **1999**	ETA Attitude Tracking **1998**	ETA Attitude Tracking **1999**	ETA Attitude Tracking **1998**	ETA Attitude Tracking **1999**	ETA Attitude Tracking **1998**	ETA Attitude Tracking **1999**	ETA Attitude Tracking **1998**	ETA Attitude Tracking **1999**
BASE:	1017	1005	307	277	251	285	234	234	225	209
	%	%	%	%	%	%	%	%	%	%
Most kids can handle new technology; most adults cannot	68	$\boxed{63}$	70	$\boxed{61}$	66	68	70	$\boxed{57}$	68	63
When you order by phone, you're really taking a chance	65	$\boxed{54}$	60	$\boxed{47}$	72	$\boxed{61}$	65	$\boxed{53}$	63	56
You should never put financial information on a computer	62	$\boxed{53}$	66	$\boxed{55}$	62	57	63	$\boxed{48}$	67	$\boxed{53}$
I cannot keep up with all the new technology	61	61	57	61	65	63	63	60	61	61
We control computers today, but someday they'll control us	40	38	38	34	41	48	44	36	36	33
Cannot imagine filing taxes except using paper returns	35	31	34	30	33	33	42	$\boxed{32}$	32	28
Computers scare me -- there's so much that can go wrong	33	30	29	33	36	34	36	28	32	24
I'm one who has no luck programming a VCR	26	26	24	22	28	27	27	28	24	25

Q1 -- Agree Completely or Agree Somewhat With Each Statement

The improvement in attitudes may be linked to the sharp increases we found in usage of many of the specific technologies covered in the study -- especially use of the Internet, telephone banking, and personal e-mail. Each of these showed gains in all regions, but especially in the West.

Usage Of Technological Applications

(Use "Regularly" Or "Occasionally")

	TOTAL		NORTHEAST		SOUTHEAST		MIDSTATES		WESTERN	
	ETA Attitude Tracking **1998**	ETA Attitude Tracking **1999**	ETA Attitude Tracking **1998**	ETA Attitude Tracking **1999**	ETA Attitude Tracking **1998**	ETA Attitude Tracking **1999**	ETA Attitude Tracking **1998**	ETA Attitude Tracking **1999**	ETA Attitude Tracking **1998**	ETA Attitude Tracking **1999**
BASE:	1017	1005	307	277	251	285	234	234	225	209
	%	%	%	%	%	%	%	%	%	%
Use of a telephone to order from a catalog	68	70	76	73	67	68	65	68	60	70
Use of a personal computer for work	63	67	67	64	62	67	64	71	56	69
Use of a telephone to order tickets to events	59	61	66	64	53	59	55	58	58	65
Use of a personal computer for entertainment	52	60	56	61	55	60	50	56	47	63
Use of the Internet to search for information	52	68	57	68	55	66	44	64	51	74
Use of a Debit Card to pay for purchases	48	55	54	58	46	53	39	44	52	68
Use of a telephone for doing personal banking	45	55	41	48	43	56	46	54	52	65
Use of e-mail for personal correspondence	43	57	46	55	40	58	38	54	46	62
Use of e-mail for business correspondence	38	45	42	41	38	41	36	47	35	53
Use of the Internet to order products or services	24	36	25	33	25	38	23	34	24	41
Use of a personal computer for doing personal banking	13	17	10	15	14	18	17	17	12	19

Q3--Use Each Technology

Awareness, Usage & Consideration Of ETA Products

Awareness, Usage & Consideration Of ETA Products

- While the Attitudinal Tracking Study is not used for on-going product tracking (which is handled elsewhere by ETA), we do ask about Taxpayer awareness, usage, and consideration of the three ETA products in order to check changes by region and to analyze ETA opportunities across the attitudinal segments.

  - We ask about product awareness, usage, and consideration within the context of all potential filing methods -- both paper and electronic -- and read a brief description of all IRS filing products to assure that respondents understand how each product is used.

- 1999 Attitudinal Tracking <u>results showed significant increases over the past year in net mentions of ETA products on each awareness, usage, and consideration measure</u> -- though <u>the product driving most of this increase was On-Line Filing</u>.

There were significant increases in both unaided and total (unaided plus aided) awareness of ETA products. However, most of these gains were due to sharp increases in mentions of On-Line Filing. Awareness of Third Party Electronic Filing and TeleFile were largely unchanged.

Levels Of Awareness Of Tax Filing Methods

	TOTAL		NORTHEAST		SOUTHEAST		MIDSTATES		WESTERN	
	ETA Attitude Tracking **1998**	ETA Attitude Tracking **1999**	ETA Attitude Tracking **1998**	ETA Attitude Tracking **1999**	ETA Attitude Tracking **1998**	ETA Attitude Tracking **1999**	ETA Attitude Tracking **1998**	ETA Attitude Tracking **1999**	ETA Attitude Tracking **1998**	ETA Attitude Tracking **1999**
BASE:	1017	1005	307	277	251	285	234	234	225	209
	%	%	%	%	%	%	%	%	%	%
Q4--Unaided Method Awareness										
Self-Prepared Paper Return	67	74	69	76	59	69	68	78	72	73
Third Party Prepared Paper Return	54	46	54	45	56	48	53	46	53	44
Third Party Electronic Filing	41	42	42	40	42	41	37	44	39	40
On-Line Filing	29	41	29	44	22	37	30	34	34	47
TeleFile	21	24	23	30	21	20	20	27	21	19
Net Unaided Mentions of ETA Products	70	74	73	79	67	70	69	74	71	74
Q4+5--Total Method Awareness (Unaided + Aided)										
Self-Prepared Paper Return	96	97	96	95	95	96	97	99	98	97
Third Party Prepared Paper Return	96	96	97	95	99	97	97	99	94	95
Third Party Electronic Filing	84	87	85	83	85	91	83	87	84	88
On-Line Filing	70	78	67	75	66	76	71	79	75	83
TeleFile	62	60	67	66	66	60	59	60	56	51
Net Total Mentions of ETA Products	95	97	95	96	96	97	94	98	94	96

Similarly, there was a significant net increase in claimed past usage of ETA products, with On-Line mentions again responsible for much of this increase. “Past year usage” results were weighted to reflect actual IRS filing method usage, thus changes mirror those found between 1998 and 1999.

Levels Of Usage Of Tax Filing Methods

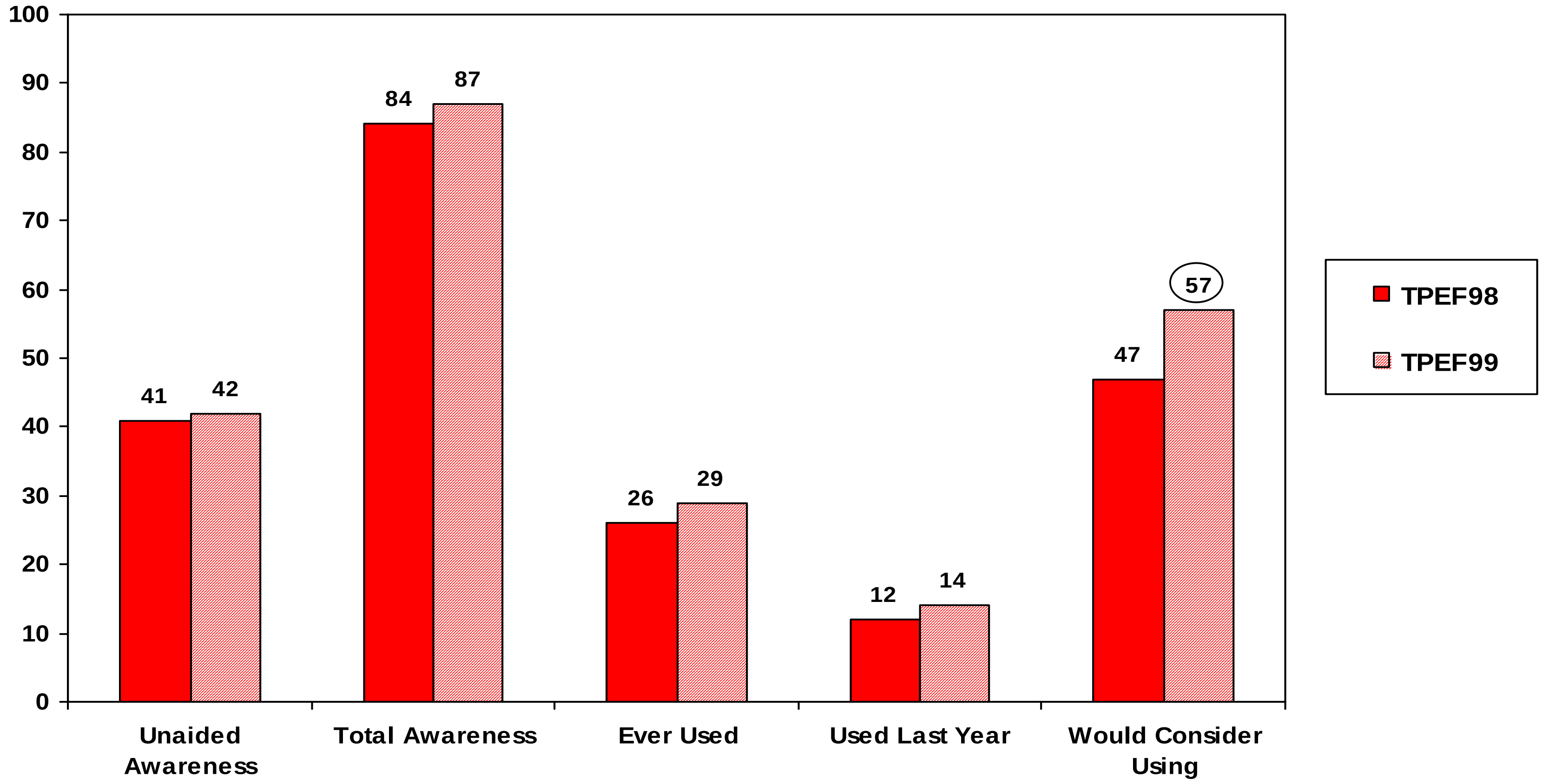
	TOTAL		NORTHEAST		SOUTHEAST		MIDSTATES		WESTERN	
	ETA Attitude Tracking **1998**	ETA Attitude Tracking **1999**	ETA Attitude Tracking **1998**	ETA Attitude Tracking **1999**	ETA Attitude Tracking **1998**	ETA Attitude Tracking **1999**	ETA Attitude Tracking **1998**	ETA Attitude Tracking **1999**	ETA Attitude Tracking **1998**	ETA Attitude Tracking **1999**
BASE:	1017	1005	307	277	251	285	234	234	225	209
	%	%	%	%	%	%	%	%	%	%
Q6--Methods Ever Used										
Self-Prepared Paper Return	70	74	69	75	65	74	73	73	73	73
Third Party Prepared Paper Return	66	68	66	63	67	70	65	73	66	67
Third Party Electronic Filing	26	29	24	24	30	32	28	32	20	28
TeleFile	10	12	12	18	9	9	9	14	8	8
On-Line Filing	3	8	3	5	1	11	4	7	4	9
Net Mentions Of ETA Products	34	41	34	39	38	41	36	44	29	39
Q7--Method Used in Past Year (1998)										
Third Party Prepared Paper Return	41	39	39	39	40	39	44	42	37	37
Self-Prepared Paper Return	36	35	37	38	33	32	35	31	38	39
Third Party Electronic Filing	12	14	12	11	15	16	10	16	11	13
TeleFile	4	5	4	5	3	5	4	6	4	4
On-Line Filing	*	1	0	1	*	1	*	1	*	1
Other	1	1	2	0	1	4	2	0	2	0
Don’t recall/Refused/No Answer	5	5	6	6	7	3	4	4	8	6
Net Mentions Of ETA Products	16	20	16	18	18	22	15	23	15	18

ETA products had their greatest gains on the "consideration" measure, where there were significant increases in mentions of each product as well as in net mentions of the group of ETA products. Note the strength of the increases in the all regions, but especially in the West.

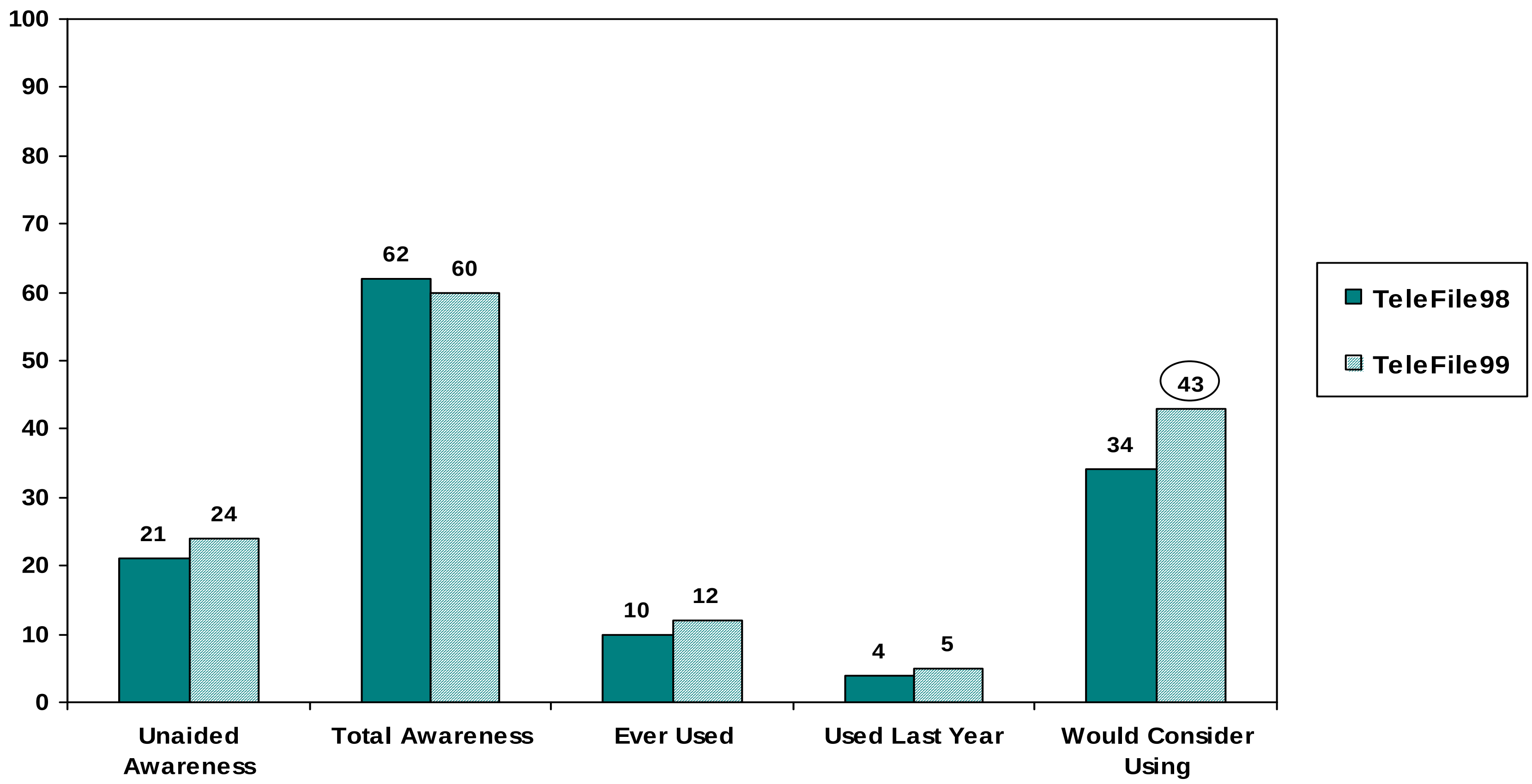
Consideration/Potential Usage Of Tax Filing Methods

	TOTAL		NORTHEAST		SOUTHEAST		MIDSTATES		WESTERN	
	ETA Attitude Tracking **1998**	ETA Attitude Tracking **1999**	ETA Attitude Tracking **1998**	ETA Attitude Tracking **1999**	ETA Attitude Tracking **1998**	ETA Attitude Tracking **1999**	ETA Attitude Tracking **1998**	ETA Attitude Tracking **1999**	ETA Attitude Tracking **1998**	ETA Attitude Tracking **1999**
BASE:	1017	1005	307	277	251	285	234	234	225	209
	%	%	%	%	%	%	%	%	%	%
Q8--Methods They Would Consider Using										
Third Party Prepared Paper Return	62	68	62	65	65	72	64	69	58	68
Self-Prepared Paper Return	57	61	58	58	55	61	59	66	57	58
Third Party Electronic Filing	47	57	47	51	49	61	47	60	46	58
On-Line Filing	41	49	41	46	41	48	39	47	43	55
TeleFile	34	43	37	44	36	45	33	40	29	41
Net Mentions Of ETA Products	71	80	73	77	72	84	69	80	70	79

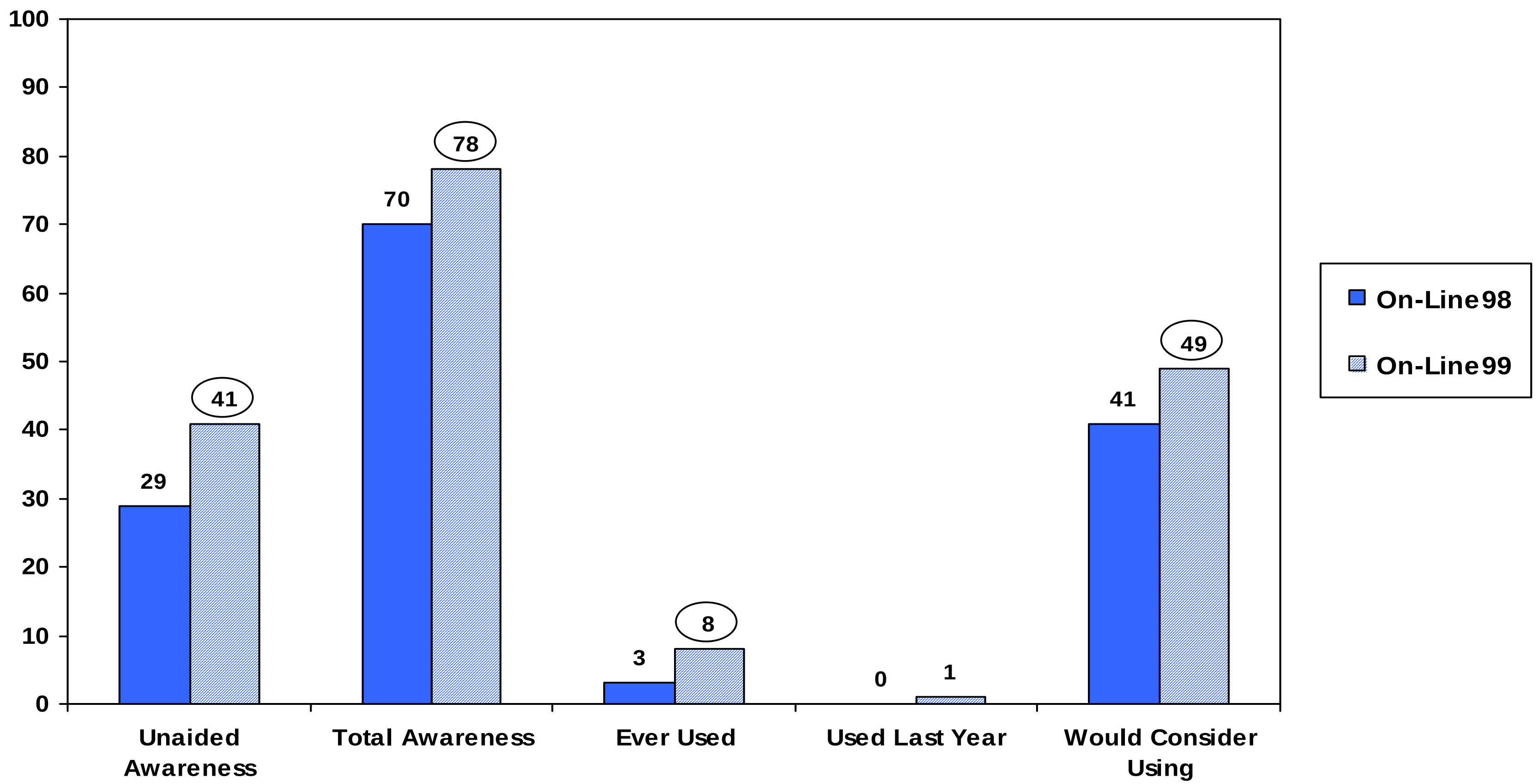
Summary Of Awareness, Usage & Consideration Of Third Party Electronic Filing



Summary Of Awareness, Usage & Consideration Of TeleFile



Summary Of Awareness, Usage & Consideration Of On-line Filing

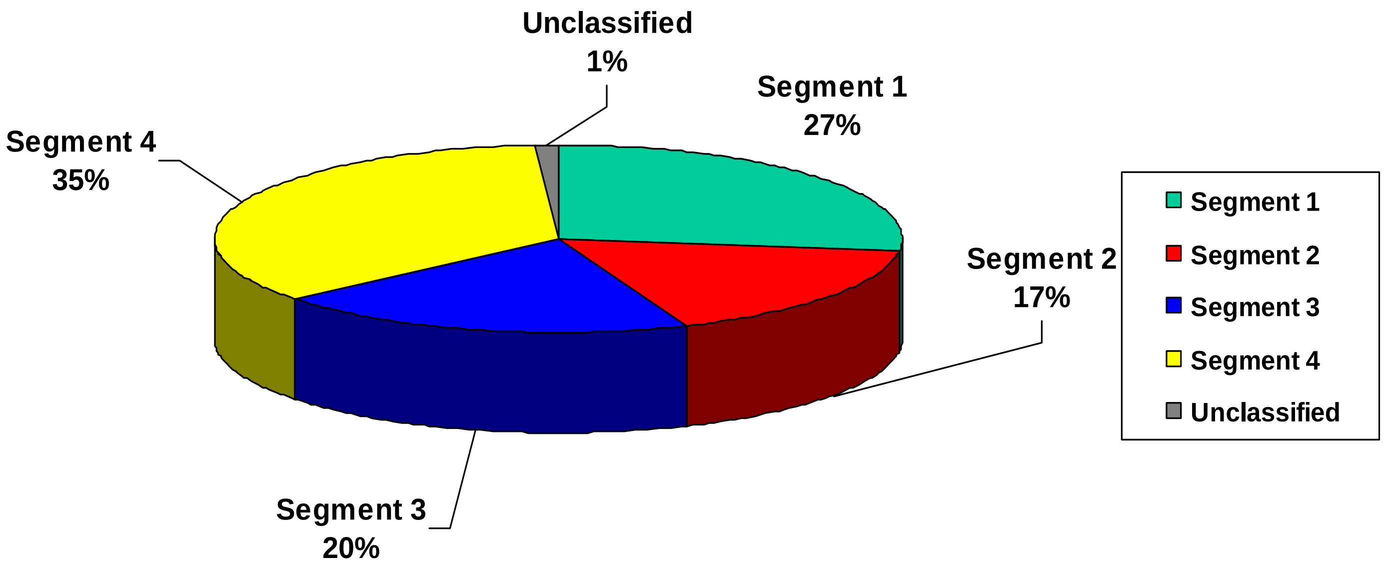


The Market Segmentation

How The Original Segments Were Developed

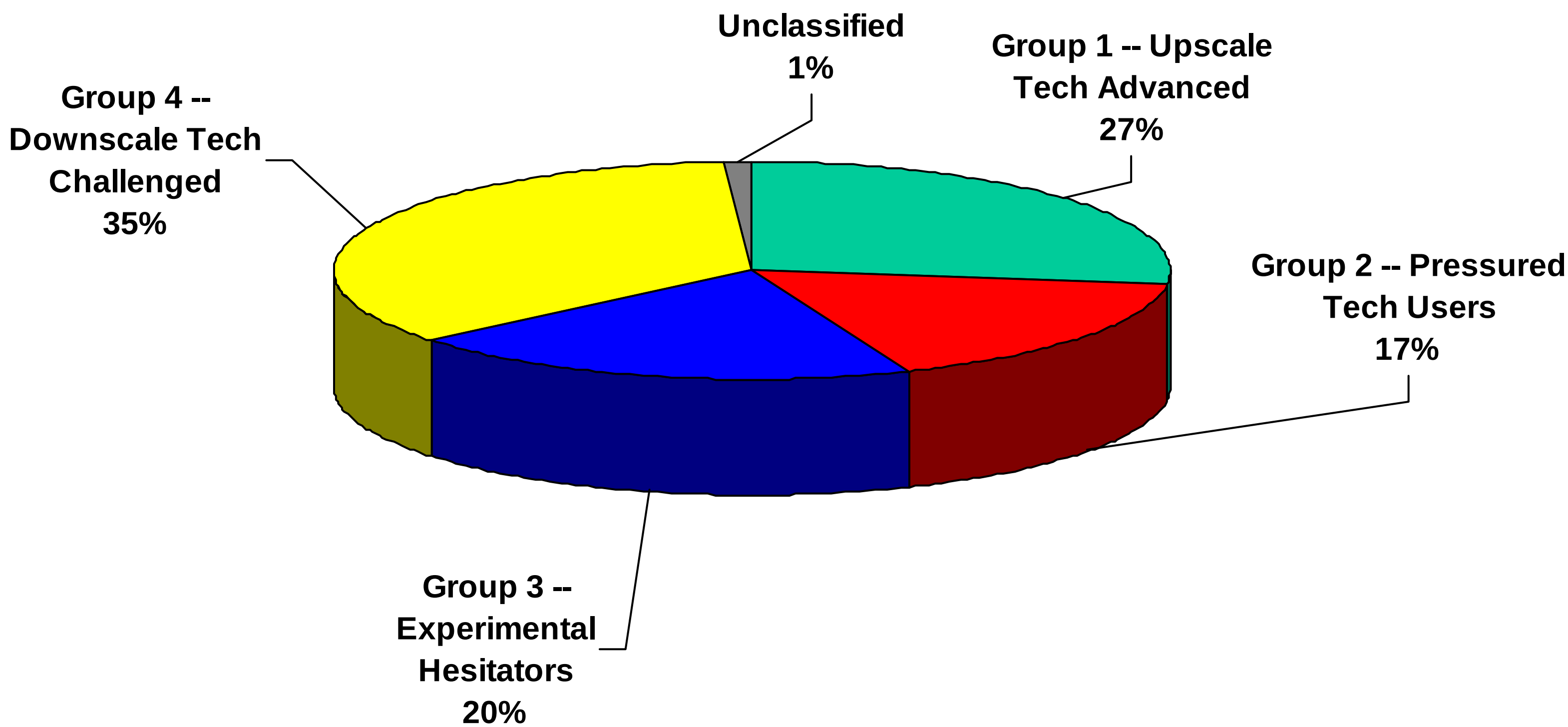
- In 1998, RMR analyzed Taxpayer attitudes toward technology, usage of technology, and general lifestyle characteristics, using a multivariate analytical technique known as "Cluster Analysis".

- This analytical method examines the level of commonality in attitudes and/or characteristics and then forms groups, or "clusters", of people who share similar attitudes or behavior. In the ***1998*** ETA attitudinal research, four clusters or segments of Taxpayers emerged as clearly distinct from each other -- with ***that year's*** sample divided as follows into each segment:



How The Original Segments Were Developed

- After detailed analysis of the attitudinal and behavioral composition of each group, we labeled or "named" the ETA Segments, as follows, to capture the essence of who was in each cluster or group.



Applying The Segmentation Technique To The 1999 Wave

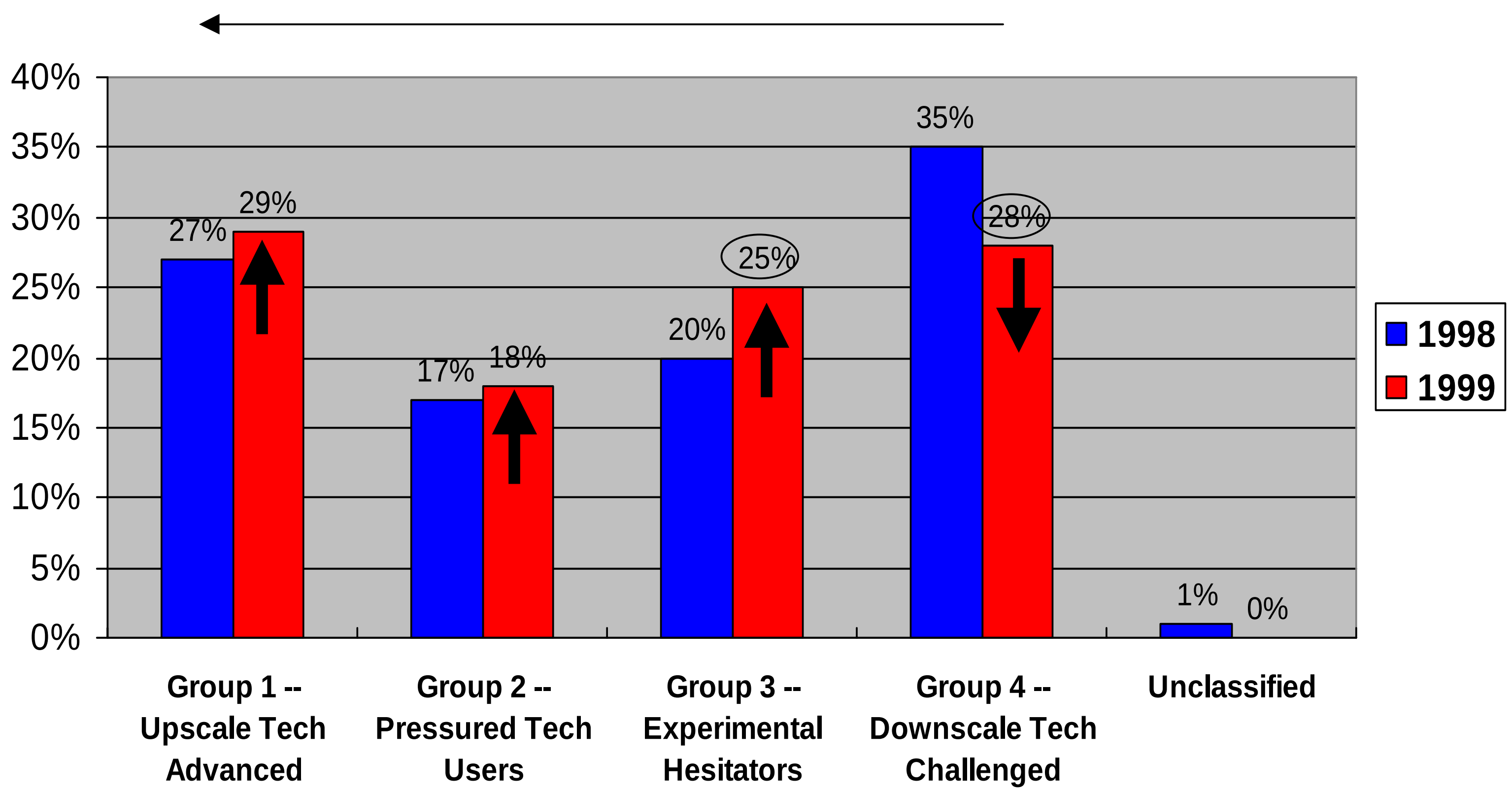
- Prior to starting the 1999 wave, we needed to reduce the length of interview (even after moving sections of the original survey into the Satisfaction study). The presence of a segmentation model gave us an opportunity to do so by eliminating attributes or items which were low contributors to the model.

- This entailed going back to the 1998 segmentation data and applying Discriminant Function Analysis, a statistical technique that examines the original model and identifies the level of contribution of each attribute or item in terms of discriminating among clusters. We then rank-ordered all original attributes and items according to their contribution and eliminated the 14 lowest contributors. We checked the 1998 data to see the degree to which the remaining 45 attributes/items correctly classified people into the same original segments. We found that the modified model (i.e., after the DFA work) correctly classified people into original segments at a rate of 87.6% -- which statisticians consider a very high rate of post-classification.

- Finally, we applied the modified model to the new 1999 data, which yielded the same segments -- though of different size naturally, since attitudes and behavior change over time (see chart on next page).

Applying The Segmentation Technique (Cont'd.)

- Comparison of segment sizes in 1999 vs. 1998 shows, as might be expected, a shift in people from the least-technologically oriented segment ("Downscale Tech Challenged") to the more technologically-forward groups. We would expect this to continue in subsequent years, as acceptance of technology continues to grow.

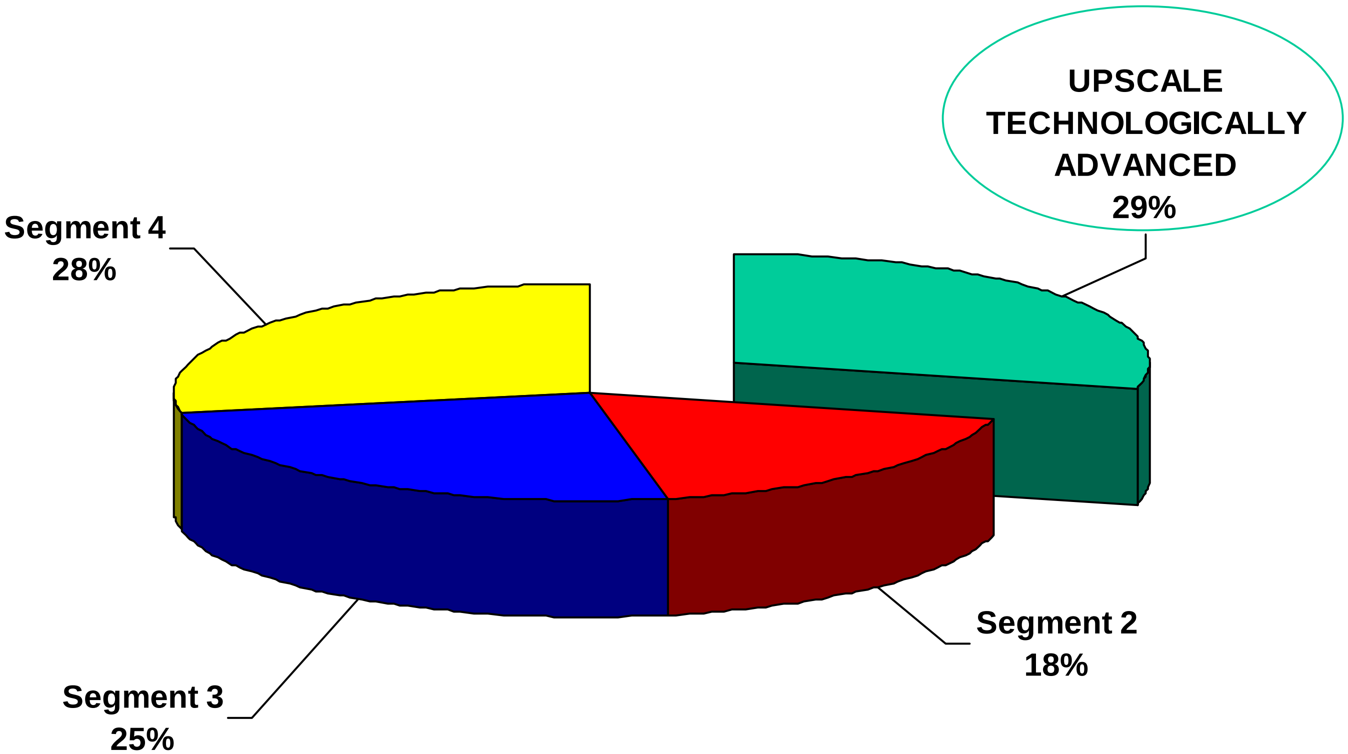


Applying The Segmentation Technique (Cont'd.)

- How long can we continue to use the same model? Theoretically, for up to 5 years. However, data must be checked carefully from year to year, especially in a fast-changing subject area such as technology, to see whether the model can be re-used or if a new segmentation is required.

- Following are detailed descriptions of each of the four segments as they are now comprised, along with analysis of changes (from 1998 to 1999) in their attitudes toward technology, attitudes toward life (psychographics), usage of specific technologies, and demographics.

Segment 1


UPSCALE
TECHNOLOGICALLY
ADVANCED
29%
Segment 4
28%
Segment 3
25%
Segment 2
18%

Who Are The "Upscale Technologically Advanced"?

- As noted in last year's analysis, this is the most technologically forward of the four segments.

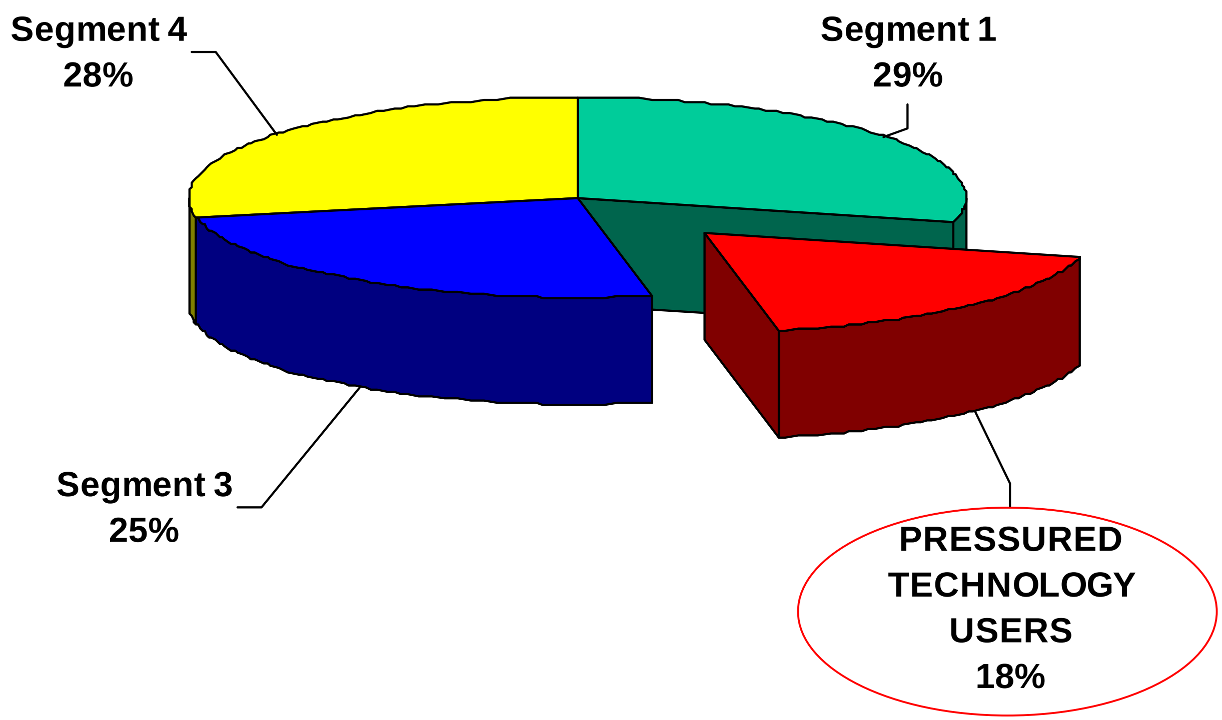
  - Virtually all (98%) say they *know the World Wide Web*, and about three-fourths or more agree that *most technology can be trusted*, that they *wish all government forms could be filed by computer*, and that they *are among the first to try new technology*. About 60% say they *rely on phone technology*, *would like to do all of their financial dealings by computer*, and *feel that the easiest way to do banking is by personal computer*. In general, they are the most likely to hold technology "leader" attitudes and the least likely to hold technology "follower" attitudes.

  - They are also significantly more likely than other segments to use the technological applications covered (particularly the Internet, e-mail, and personal computers).

- Psychographically, they see themselves as *optimistic about their financial situation* and less likely to *worry about money* (though it is the most financially driven of the segments). They also indicate that they are innovative and daring, generally the leaders within a group, trendy and outgoing, and quite comfortable with the pace of change.

- In this research, as in most segmentation efforts, there is a clear correlation between attitudes and behavior and demographic characteristics. The demographics of this group skew toward males who are younger, more upscale, and better educated than the other segments and who are the least likely to be married or to have children.

Segment 2

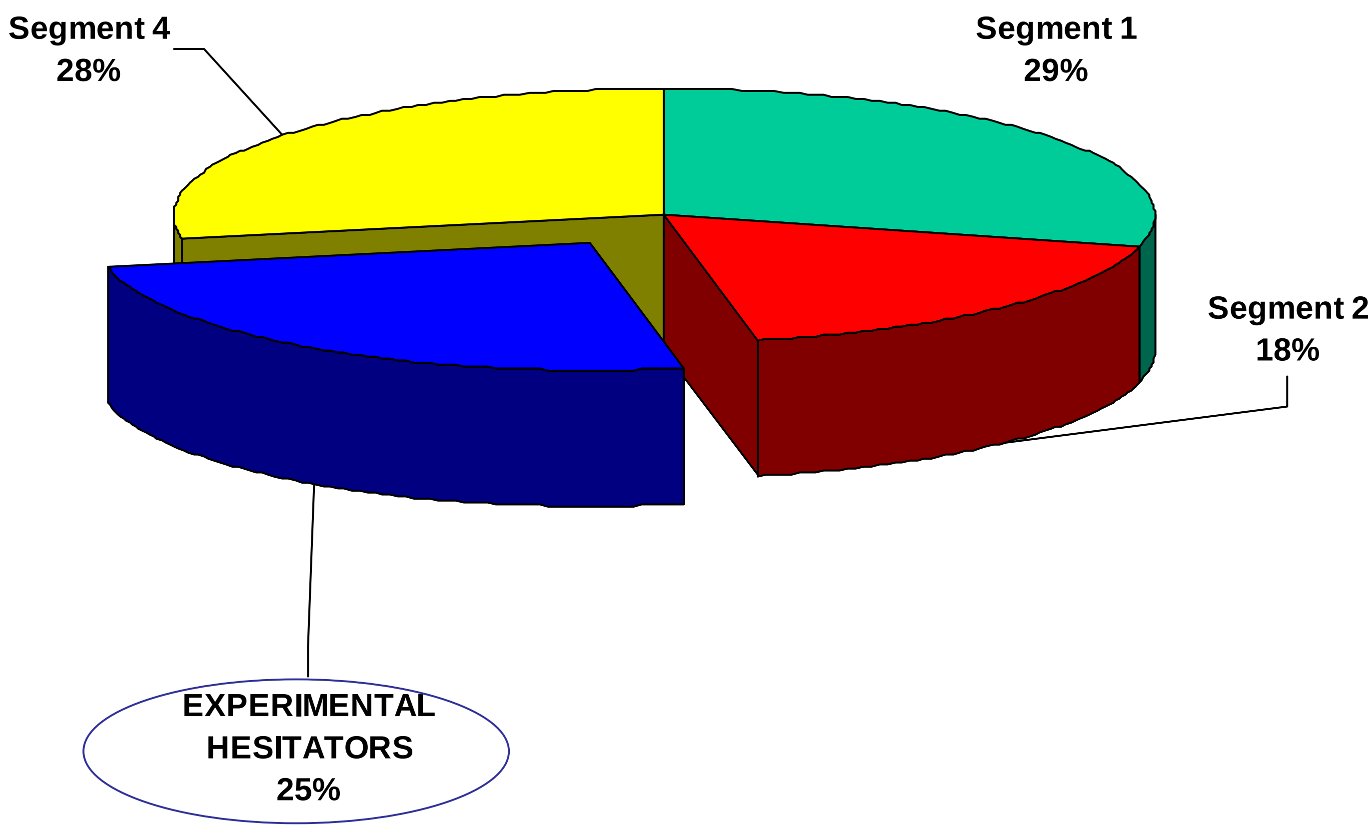


Segment 4
28%
Segment 1
29%
Segment 3
25%
PRESSURED TECHNOLOGY USERS
18%

Who Are The “Pressured Technology Users”?

- Next on the technology continuum are the “Pressured Technology Users”.
  - Like the “Upscale Technologically Advanced”, the vast majority (87%) say they *know the World Wide Web*, and about three-fourths agree that *most technology can be trusted* and that they *wish all government forms could be filed by computer*. But they are not as likely as the “Upscale Technology Advanced” to be *among the first to try new technology*, to *rely on phone technology*, or to want to *do banking by personal computer*.
  - Yet their usage of the various technological applications covered in the study is strong -- particularly their usage of the Internet, personal computers, e-mail, and even telephone banking.
- <u>Psychographically</u>, this group shows signs of high stress -- both personal stress (they had highest agreement with the statements, *I need to remind myself to slow down and enjoy life, I worry that I don’t spend enough time with my family,* and *the world is changing too fast*) and financial stress (they *worry about money* and say they *live from paycheck to paycheck*).
- <u>Demographically</u>, this group skews female and, while they are the youngest segment, they also have the largest average household size and the greatest presence of children -- all without the high education and income of the first segment. Thus, the pressure.

Segment 3

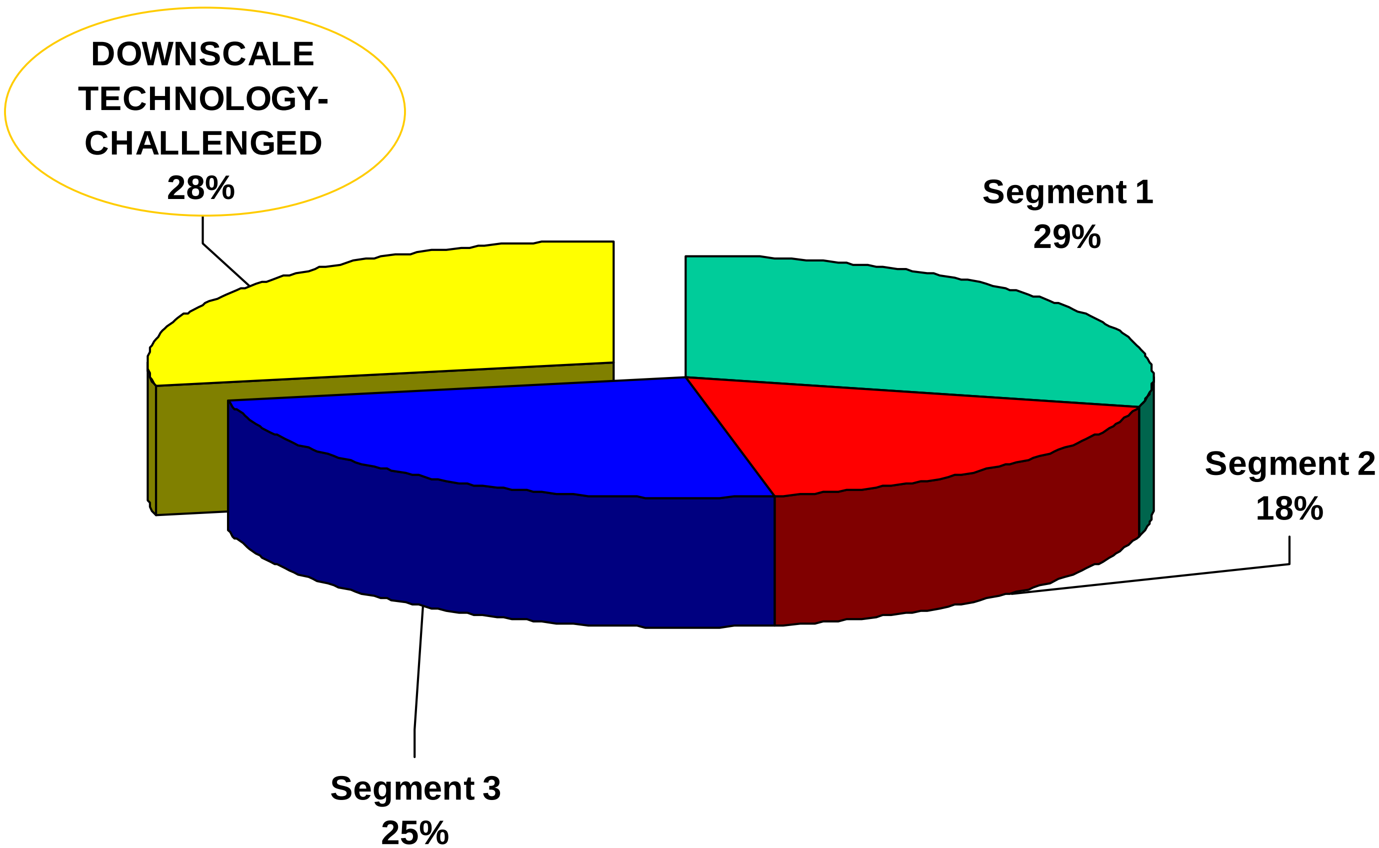


Segment 4
28%
Segment 1
29%
Segment 2
18%
EXPERIMENTAL
HESITATORS
25%

Who Are The "Experimental Hesitators"?

- Although they use technology, "Experimental Hesitators" are far less trusting of it than the preceding segments -- and they fall third along the technology continuum.
  - Like the first two groups, most (89%) say they *know the World Wide Web*. However, this group does not seem eager to embrace technology -- only about half agree that *most technology can be trusted* and only about one-third or so say they *wish all government forms could be filed by computer*, that they are *among the first to try new technology*, or even that they *rely on phone technology*.
  - Overall, their usage of the specific technological applications lags behind that of the first two groups, although they do use the Internet and e-mail at about the same level.
- <u>Psychographically</u>, this group of Taxpayers seems the most laid-back of the segments. They are not as personally and financially stressed as the "Pressured Technology Users", nor are they as innovative, outgoing, forward-thinking, or financially driven as the "Upscale Tech Advanced".
- <u>Demographically</u>, they skew female and are the oldest of the segments. However, with strong incomes and education and average household size and presence of children, we do not see in this group the stress or financial drive that marks the other segments.

Segment 4



DOWNSCALE
TECHNOLOGY-
CHALLENGED
28%
Segment 1
29%
Segment 2
18%
Segment 3
25%

Who Are The “Downscale Technology-Challenged”?

- At the far end of the technology continuum are the “Downscale Technology-Challenged”.
  - Less than half of this segment say they *know the World Wide Web* or agree that *most technology can be trusted.* In general, this group is the least likely to agree with the technology “leader” statements and the most likely to agree with the “follower” statements.
  - They also have, by far, the lowest usage of all of the specific technologies covered in the study -- with only one-fourth or less using personal computers or the Internet and with one-sixth or less using e-mail for either business or personal purposes.
- The <u>psychographic</u> self-ratings of this group show it having some of the high-stress characteristics as the “Pressured Tech Users” -- both personal stress (*I need to remind myself to slow down and enjoy life, I worry that I don’t spend enough time with my family,* and *the world is changing too fast*) and financial stress *(I often worry about money* and *live from paycheck to paycheck*). In addition, this group seems to be the least likely of the segments to accept change and the least comfortable with computer technology.
- <u>Demographically</u>, this group is also older but with no gender skew. They are average in terms of household size and presence of children, but far below the other groups in terms of income and education.

How Have The Segments Changed Over The Past Year?

- Although the four ETA attitudinal segments are very similar in composition now vs. 1998, there have been changes in attitudes and technology usage within each group which reflect changes discussed earlier for Taxpayers in general. To summarize:

  - Attitudes toward technology have improved, but mainly among the more tech-accepting of the segments -- the "Upscale Tech Advanced" and, to a lesser extent, the "Pressured Tech Users". There has been only minor improvement in the attitudes of the "Experimental Hesitators" and "Downscale Tech Challenged".

  - Usage of specific technologies has also increased -- but again, mainly among the two more tech-forward segments. However, it should be pointed out that there have been increases in usage of computers, the Internet, and e-mail among the third segment, the "Experimental Hesitators". The only notable increases in tech usage among the "Downscale Tech Challenged" came not in computers but in use of debit cards and telephone banking.

  - With a successful post-classification technique, there have been few significant changes in the psychographic or demographic composition of each group. The most notable changes were demographic and related to increasing gender and education skews and increasing income levels.

Changes In Segment Acceptance Of Technology

Technological Leader Statements

(% Agree)

	TOTAL		UPSCALE TECH ADVANCED		PRESSURED TECH USERS		EXPERI-MENTAL HESITATORS		DOWNSCALE TECH CHALLENGED	
	ETA Attitude Tracking **1998**	ETA Attitude Tracking **1999**	ETA Attitude Tracking **1998**	ETA Attitude Tracking **1999**	ETA Attitude Tracking **1998**	ETA Attitude Tracking **1999**	ETA Attitude Tracking **1998**	ETA Attitude Tracking **1999**	ETA Attitude Tracking **1998**	ETA Attitude Tracking **1999**
BASE:	1017	1005	278	313	172	180	204	238	360	274
	%	%	%	%	%	%	%	%	%	%
Have a good idea of what the World Wide Web is	72	80	93	98	83	87	77	89	48	46
I think most technology can be trusted	60	63	78	80	69	69	53	50	47	54
Wish all government forms could be filed by computer	54	56	75	82	69	74	39	38	39	34
I'm one of the first to try new technology	48	49	72	73	53	52	43	38	31	31
The kind of person who needs lots of phone technology	45	46	59	56	44	51	36	37	40	40
If I could, I'd do all my financial dealings by computer	37	41	57	62	56	59	22	17	23	28
The easiest way to do banking is by personal computer	32	34	49	58	48	45	22	18	18	15
Rather e-mail friends/family than talk to them on the phone	19	23	22	28	23	34	24	23	13	11

Q1 -- Agree Completely or Agree Somewhat With Each Statement

Changes In Acceptance Of Technology (Cont'd.)

Technological Follower Statements

(% Agree)

	TOTAL		UPSCALE TECH ADVANCED		PRESSURED TECH USERS		EXPERI-MENTAL HESITATORS		DOWNSCALE TECH CHALLENGED	
	ETA Attitude Tracking **1998**	ETA Attitude Tracking **1999**	ETA Attitude Tracking **1998**	ETA Attitude Tracking **1999**	ETA Attitude Tracking **1998**	ETA Attitude Tracking **1999**	ETA Attitude Tracking **1998**	ETA Attitude Tracking **1999**	ETA Attitude Tracking **1998**	ETA Attitude Tracking **1999**
BASE:	1017	1005	278	313	172	180	204	238	360	274
	%	%	%	%	%	%	%	%	%	%
Most kids can handle new technology; most adults cannot	68	$\boxed{63}$	50	43	73	65	64	63	83	80
When you order by phone, you're really taking a chance	65	$\boxed{54}$	47	$\boxed{31}$	61	54	68	$\boxed{59}$	79	74
Should never put financial information on a computer	62	$\boxed{53}$	43	$\boxed{29}$	51	54	71	$\boxed{62}$	78	$\boxed{71}$
I cannot keep up with all the new technology	61	61	38	38	51	55	69	70	81	82
We control computers today, someday they'll control us	40	38	15	11	33	40	43	45	60	58
Can't imagine filing taxes except using paper returns	35	31	14	$\boxed{7}$	14	20	46	37	55	56
Computers scare me -- so much that can go wrong	33	30	7	7	14	18	34	31	61	63
I'm one who has no luck programming a VCR	26	26	12	13	19	19	31	29	36	39

Q1 -- Agree Completely or Agree Somewhat With Each Statement

Changes In Usage Of Technology

Regular/Occasional Usage Of Each Technology

	TOTAL		UPSCALE TECH ADVANCED		PRESSURED TECH USERS		EXPERI-MENTAL HESITATORS		DOWNSCALE TECH CHALLENGED	
	ETA Attitude Tracking **1998**	ETA Attitude Tracking **1999**	ETA Attitude Tracking **1998**	ETA Attitude Tracking **1999**	ETA Attitude Tracking **1998**	ETA Attitude Tracking **1999**	ETA Attitude Tracking **1998**	ETA Attitude Tracking **1999**	ETA Attitude Tracking **1998**	ETA Attitude Tracking **1999**
BASE:	1017	1005	278	313	172	180	204	238	360	274
	%	%	%	%	%	%	%	%	%	%
Use of a telephone to order from a catalog	68	70	78	74	65	62	74	79	58	62
Use of a personal computer for work	63	67	83	89	77	76	72	75	35	31
Use of a telephone to order tickets to events	59	61	75	71	58	58	65	70	43	46
Use of a personal computer for entertainment	52	60	73	76	67	73	55	69	27	25
Use of the Internet to search for information	52	68	79	93	69	79	61	79	18	23
Use of a Debit Card to pay for purchases	48	55	63	66	59	59	53	58	29	38
Use of a telephone for doing personal banking	45	55	58	63	55	68	45	55	29	38
Use of e-mail for personal correspondence	43	57	68	83	56	69	53	66	11	14
Use of e-mail for business correspondence	38	45	62	75	41	39	51	51	11	11
Use of the Internet to order products or services	24	36	45	65	28	37	26	34	6	7
Use of a personal computer for doing personal banking	13	17	25	32	14	23	10	11	4	4

Q3--Use Each Technology

Changes In Segment Psychographic Characteristics

Psychographic Statements

(% Agree)

	TOTAL		**UPSCALE TECH ADVANCED**		**PRESSURED TECH USERS**		**EXPERI-MENTAL HESITATORS**		**DOWNSCALE TECH CHALLENGED**	
	ETA Attitude Tracking **1998**	ETA Attitude Tracking **1999**	ETA Attitude Tracking **1998**	ETA Attitude Tracking **1999**	ETA Attitude Tracking **1998**	ETA Attitude Tracking **1999**	ETA Attitude Tracking **1998**	ETA Attitude Tracking **1999**	ETA Attitude Tracking **1998**	ETA Attitude Tracking **1999**
BASE:	1017	1005	278	313	172	180	204	238	360	274
	%	%	%	%	%	%	%	%	%	%
I like to be around people who are open-minded	98	98	99	98	99	100	97	98	97	98
Over next few years, my financial situation will improve	93	92	98	98	92	95	89	85	91	90
My family is my main source of satisfaction	92	88	87	84	93	88	93	92	95	90
I make time for things that are really important to me	90	88	95	96	84	76	92	88	88	89
I like to experiment with new ways of doing things	85	87	92	96	87	87	79	83	83	80
I need to remind myself to slow down and enjoy life	79	83	73	76	92	93	69	78	84	86
The world is changing too fast	65	63	38	30	75	80	64	71	80	78
I often worry about money	63	61	48	46	90	82	60	56	63	66
Like to be up on latest events, movies, fashions, etc.	60	65	78	78	47	59	55	59	56	59
Generally make the decisions on what the group will do	56	57	76	73	44	53	47	49	51	50
I like to do a lot of entertaining in my home	52	46	72	59	26	23	48	47	52	45

Q9--Agree Completely or Agree Somewhat With Each Statement

Changes In Psychographic Characteristics (Cont'd.)

More Psychographic Statements
(% Agree)

	TOTAL		UPSCALE TECH ADVANCED		PRESSURED TECH USERS		EXPERI-MENTAL HESITATORS		DOWNSCALE TECH CHALLENGED	
	ETA Attitude Tracking **1998**	ETA Attitude Tracking **1999**	ETA Attitude Tracking **1998**	ETA Attitude Tracking **1999**	ETA Attitude Tracking **1998**	ETA Attitude Tracking **1999**	ETA Attitude Tracking **1998**	ETA Attitude Tracking **1999**	ETA Attitude Tracking **1998**	ETA Attitude Tracking **1999**
BASE:	1017	1005	278	313	172	180	204	238	360	274
	%	%	%	%	%	%	%	%	%	%
I worry that I don't spend enough time with my family	48	52	40	41	66	69	39	46	52	59
Prefer to shop in better stores -- though things cost more	48	45	57	58	37	40	46	39	48	41
Like to be in situations where the unexpected can happen	47	43	65	59	28	36	45	38	43	$\boxed{35}$
I live from pay check to pay check	43	43	22	20	71	70	33	35	52	56
Having a lot of money is very important to me	41	46	51	56	42	44	28	35	40	47
It is the luxuries in life that make life worthwhile	40	$\boxed{25}$	45	$\boxed{29}$	32	25	25	$\boxed{13}$	49	$\boxed{31}$
Am more comfortable at my computer than anywhere else	16	15	20	21	24	28	12	9	11	8

Q9--Agree Completely or Agree Somewhat With Each Statement

Changes In Demographic Composition Of Each Segment

	TOTAL		UPSCALE TECH ADVANCED		PRESSURED TECH USERS		EXPERI-MENTAL HESITATORS		DOWNSCALE TECH CHALLENGED	
	ETA Attitude Tracking **1998**	ETA Attitude Tracking **1999**	ETA Attitude Tracking **1998**	ETA Attitude Tracking **1999**	ETA Attitude Tracking **1998**	ETA Attitude Tracking **1999**	ETA Attitude Tracking **1998**	ETA Attitude Tracking **1999**	ETA Attitude Tracking **1998**	ETA Attitude Tracking **1999**
BASE:	1017	1005	278	313	172	180	204	238	360	274
	%	%	%	%	%	%	%	%	%	%
QA--Gender										
Male	46	48	53	61	47	37	42	39	43	50
Female	54	52	48	39	54	63	58	60	58	50
QB--Average Age	40	41	38	39	39	38	41	43	41	43
Q15--Marital Status										
Married	62	60	59	56	61	61	68	64	63	59
Single But Living With Someone	8	7	9	9	8	10	8	5	6	5
Single & Never Married	15	17	18	23	12	16	10	12	15	16
Separated, Divorced or Widowed	15	16	14	13	19	13	14	18	16	19
Q13--Average HH Size	2.9	3.0	2.8	2.7	3.1	3.4	2.8	3.1	3.0	2.9
Q14--Presence of Children										
Have Children	54	52	54	43	62	69	50	53	54	51
No children present	46	48	46	57	38	31	50	47	46	49
Q17--Median HH Income (000)	$43K	$47K	$57K	$62K	$41K	$47	$48K	$51K	$35K	$34K
Q16--Education										
No College	44	36	22	14	38	43	39	27	68	62
Some College	56	64	78	85	62	56	61	73	32	38

Changes In Awareness & Usage Of ETA Products

- The increases noted earlier in the levels of awareness and claimed usage of ETA products among Taxpayers have come primarily from the two most tech-forward segments ("Upscale Tech Advanced" and "Pressured Tech Users").

- However, as shown in the consideration chart that follows, there was increasing interest in all ETA products in all groups -- although the more significant changes still came mainly from the two most tech-forward groups. Specifically:

  - There was a significant increase in consideration of Third Party Electronic Filing in all four segments -- including the two that are generally less tech-forward.

  - There were a significant increase in consideration of TeleFile among the "Upscale Tech Advanced" and "Pressured Tech Users", while interest in this product among the other two segments was directionally (but not significantly) higher.

  - Finally, there was a significant increase in consideration of On-Line Filing among the "Upscale Tech Advanced" segment, but with only slight increases among the other segments.

Changes In Segment Awareness Of ETA Products

Levels Of Awareness Of Tax Filing Methods

	TOTAL		UPSCALE TECH ADVANCED		PRESSURED TECH USERS		EXPERI-MENTAL HESITATORS		DOWNSCALE TECH CHALLENGED	
	ETA Attitude Tracking **1998**	ETA Attitude Tracking **1999**	ETA Attitude Tracking **1998**	ETA Attitude Tracking **1999**	ETA Attitude Tracking **1998**	ETA Attitude Tracking **1999**	ETA Attitude Tracking **1998**	ETA Attitude Tracking **1999**	ETA Attitude Tracking **1998**	ETA Attitude Tracking **1999**
BASE:	1017	1005	278	313	172	180	204	238	360	274
	%	%	%	%	%	%	%	%	%	%
Unaided Method Awareness										
Self-Prepared Paper Return	67	74	73	84	67	71	68	79	62	61
Third Party Prepared Paper Return	54	46	54	48	50	45	62	48	52	43
Third Party Electronic Filing	41	42	42	47	52	53	40	44	34	26
On-Line Filing	29	41	40	50	29	40	31	47	19	25
TeleFile	21	24	25	31	20	28	21	23	19	16
Net Mentions Of ETA Products	70	74	79	85	79	83	67	79	61	54
Q4+5--Total Method Awareness (Unaided + Aided)										
Third Party Prepared Paper Return	96	97	97	99	95	95	99	98	95	93
Self-Prepared Paper Return	96	96	98	99	98	94	96	99	94	93
Third Party Electronic Filing	84	87	90	90	91	91	85	88	76	80
On-Line Filing	70	78	85	89	74	79	73	83	54	60
TeleFile	62	60	67	70	66	64	63	54	57	52
Net Mentions of ETA Products	95	97	97	99	98	98	95	98	91	92

Changes In Segment Usage Of ETA Products

Levels Of Usage Of Tax Filing Methods

	TOTAL		UPSCALE TECH ADVANCED		PRESSURED TECH USERS		EXPERI-MENTAL HESITATORS		DOWNSCALE TECH CHALLENGED	
	ETA Attitude Tracking **1998**	ETA Attitude Tracking **1999**	ETA Attitude Tracking **1998**	ETA Attitude Tracking **1999**	ETA Attitude Tracking **1998**	ETA Attitude Tracking **1999**	ETA Attitude Tracking **1998**	ETA Attitude Tracking **1999**	ETA Attitude Tracking **1998**	ETA Attitude Tracking **1999**
BASE:	1017	1005	278	313	172	180	204	238	360	274
	%	%	%	%	%	%	%	%	%	%
Q6--Methods Ever Used										
Self-Prepared Paper Return	70	74	76	85	74	71	70	81	63	58
Third Party Prepared Paper Return	66	68	65	63	66	69	72	70	65	71
Third Party Electronic Filing	26	29	23	28	34	34	19	21	28	33
TeleFile	10	12	14	20	10	12	5	7	9	9
On-Line Filing	3	8	4	15	4	12	2	3	2	3
Net Mentions Of ETA Products	34	41	35	50	42	47	25	27	35	38
Q7--Method Used In Past Year (1998)										
Third Party Prepared Paper Return	40	39	36	33	36	36	47	40	42	46
Self-Prepared Paper Return	36	35	35	40	35	33	38	39	33	27
Third Party Electronic Filing	12	14	12	12	16	20	8	9	15	17
TeleFile	4	5	6	10	4	3	3	2	4	4
On-Line Filing	*	1	1	2	1	1	1	*	0	*
Other	1	1	2	0	1	6	1	0	0	0
Don't recall	5	5	8	3	5	2	2	9	6	6
Net Mentions Of ETA Products	16	20	19	24	23	24	11	12	19	21

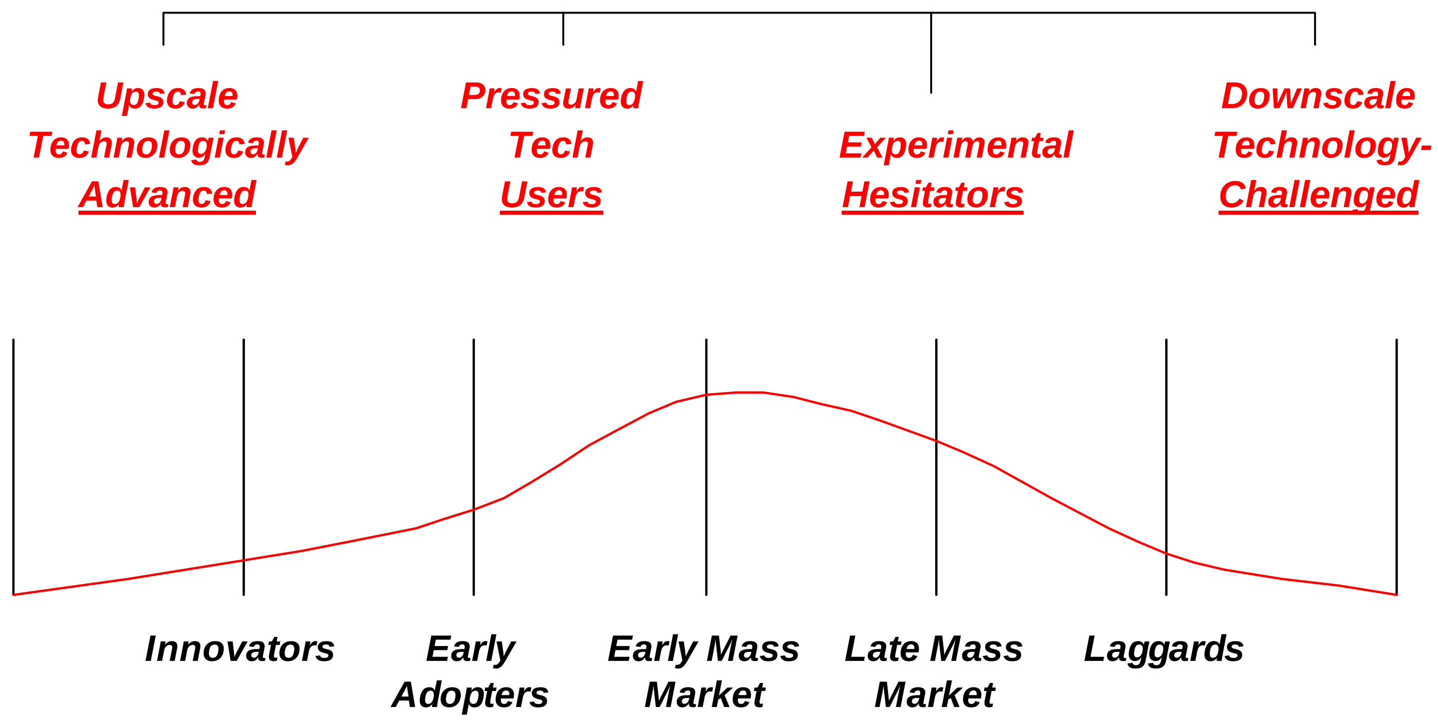
Changes In Segment Consideration Of ETA Products

Consideration/Potential Of Tax Filing Methods

	TOTAL		UPSCALE TECH ADVANCED		PRESSURED TECH USERS		EXPERI-MENTAL HESITATORS		DOWNSCALE TECH CHALLENGED	
	ETA Attitude Tracking **1998**	ETA Attitude Tracking **1999**	ETA Attitude Tracking **1998**	ETA Attitude Tracking **1999**	ETA Attitude Tracking **1998**	ETA Attitude Tracking **1999**	ETA Attitude Tracking **1998**	ETA Attitude Tracking **1999**	ETA Attitude Tracking **1998**	ETA Attitude Tracking **1999**
BASE:	1017	1005	278	313	172	180	204	238	360	274
	%	%	%	%	%	%	%	%	%	%
Q8--Methods They Would Consider Using										
Third Party Prepared Paper Return	62	68	61	63	58	66	61	73	65	71
Self-Prepared Paper Return	57	61	60	64	60	62	59	62	52	54
Third Party Electronic Filing	47	57	48	59	57	67	43	54	44	53
On-Line Filing	41	49	62	73	51	56	36	43	23	25
TeleFile	34	43	41	51	45	54	28	34	28	34
Net Mentions Of ETA Products	71	80	80	91	84	91	66	73	61	67

Revisiting The Product Adoption Model

- Last year, when we analyzed the four segments in terms of acceptance and usage of technology, we saw they existed along a continuum of tech leaders...to...followers -- and noted that, for ETA marketing purposes, this continuum might compare to that of the innovators…to…laggards of the classic product adoption process of marketing theory.



Two Of The Segments Offer The Greatest Opportunity

- Data from the 1999 study reinforce the comparison to the product adoption model and underscore the potential of two of the attitudinal segments -- the “Upscale Tech Advanced” and “Pressured Tech Users”.

    - These two segments now account for 49% of all Taxpayers and they are the most technologically forward of the groups as well as the groups with highest awareness and most positive consideration of ETA products.

    - In theory, these segments would be the *Innovators* and *Early Adopters*, and -- given their total size (49%) -- might also include some of the *Early Mass Market*.

- The “Experimental Hesitators” and “Downscale Tech-Challenged” seem to offer less immediate opportunity.

    - These are not technologically-forward Taxpayers and they have both lower awareness and far lower consideration of ETA products than the two high-potential groups.

    - In theory, these would be the *Mass Market* and *Laggards* -- although, as noted in 1998, the “Downscale Tech-Challenged” may offer some opportunity, given its higher than average previous use of ETA products and its lower income (which may generate interest in the faster refunds of products like TeleFile).

Reaching The Attitudinal Segments

- To determine how to reach potential ETA targets, respondents were asked about their media habits. We focus here just on those in each segment of the 1999 sample who have not yet tried/used any ETA product. Looking only at these non-users/non-triers...

  - All segments can be reached efficiently through the following leading media:

    - FM radio station stations
    - Early evening TV news
    - Late evening TV news
    - All-news cable TV
    - TV sports programs
    - And cable family/life programs.
    - Local newspapers are also strong in all groups, though cost-prohibitive.

  - There are several additional media which are significantly stronger in reaching the high-opportunity “Upscale Tech Advanced” segment than the other segments:

    - The WWW/Internet
    - News magazines
    - National newspapers
    - And business magazines.

Reaching The Attitudinal Segments (Cont'd.)

Media Habits -- Print & Radio

BASE = Have Never Used An ETA Product:	TOTAL 548 %	UPSCALE TECH ADVANCED 139 %	PRESSURED TECH USERS 90 %	EXPERIMENTAL TECH HESITATORS 163 %	DOWNSCALE TECH CHALLENGED 156 %
Q10--Media Read/Subscribed To					
Your Local Newspaper(s)	**80**	**79**	**83**	**83**	**78**
Entertainment Magazines -- Ent. Weekly, People, etc.	32	35	32	31	31
World Wide Web/Internet	39	**68**	35	**48**	7
News Magazines -- Time, Newsweek, USN&WR	29	**37**	24	**36**	18
Sports Magazines such as SI or Inside Sports	22	23	17	19	25
National Newspapers -- NY Times or USA Today	20	**30**	13	20	17
Business Magazines -- Bus Week or Forbes	21	**35**	21	19	13
Fashion Magazines -- Allure, Elle, Cosmopolitan, etc.	17	19	20	13	18
Q11--Radio Stations Listened To Regularly					
FM Music Stations	**90**	**86**	**93**	**91**	**91**
All News Stations	28	31	26	26	28
AM Mixed Format Stations (Talk + News + Features)	33	33	25	38	31
All Talk Stations	23	26	19	25	22
AM Music Stations	20	17	20	20	23
All Sports/Sports Talk Stations	12	13	12	9	14
Financial News Stations	12	17	12	10	12

Reaching The Attitudinal Segments (Cont'd.)

Media Habits -- Television

BASE = Have Never Used An ETA Product:	TOTAL 548 %	UPSCALE TECH ADVANCED 139 %	PRESSURED TECH USERS 90 %	EXPERIMENTAL TECH HESITATORS 163 %	DOWNSCALE TECH CHALLENGED 156 %
Q12--TV Programming Watched Regularly					
Early evening news programs	**74**	**68**	**72**	**80**	**74**
Late evening news programs	**58**	**61**	**55**	**59**	**56**
All News cable -- CNN, Headline News, MSNBC	**50**	**59**	**41**	**50**	**48**
Sports Programs (e.g. Tennis, Baseball, etc.)	**53**	**54**	**43**	**55**	**54**
Cable Family/Life Programs	**53**	**41**	**59**	**56**	**54**
Non-Premium Cable Movie Channels such as AMC	46	48	46	48	42
Early evening investigative shows	40	31	40	45	42
Early eve. enter. shows such as Entertainment Tonight	37	33	37	30	47
Premium Cable Movie Channels -- HBO, Showtime, etc.	32	35	38	23	37
Early morning shows -- Today, This Morning, etc.	31	28	24	33	36
Late night talk or variety shows	27	30	22	23	31
Game shows	23	12	18	21	36
Later morning talk -- Regis & Kathy, Rosie, etc.	9	6	3	5	20
Afternoon soap operas	10	4	13	6	18

Conclusions

Conclusions

1. **Taxpayers & Technology**: 1999 Attitudinal Tracking results show that Taxpayers are still ambivalent toward technology (as they were in 1998), yet are starting to accept it more as their usage of specific technologies becomes more commonplace.

   - Indications that acceptance of technology is increasing came from significant increases in the proportion of respondents who agreed with statements characteristic of a technological "leader" and in the decreasing proportion of respondents who agree with the technological "follower" statements (e.g., *you should never put financial information on a computer*).

   - It was in the Western region that we saw the greatest improvement in the technological "leader" attitudes, but we found improvement across all regions in three technological "follower" attitudes related to ETA products -- *one should never put financial information on a computer*, *cannot imagine filing taxes except using paper returns*, and *computers scare me, there's so much that can go wrong*.

   - The improvement in attitudes may be linked to the sharp increases we found in usage of many of the specific technologies covered in the study -- especially use of the Internet, telephone banking, and personal e-mail. Each of these showed gains in all regions, but especially in the West.

Conclusions (Cont'd.)

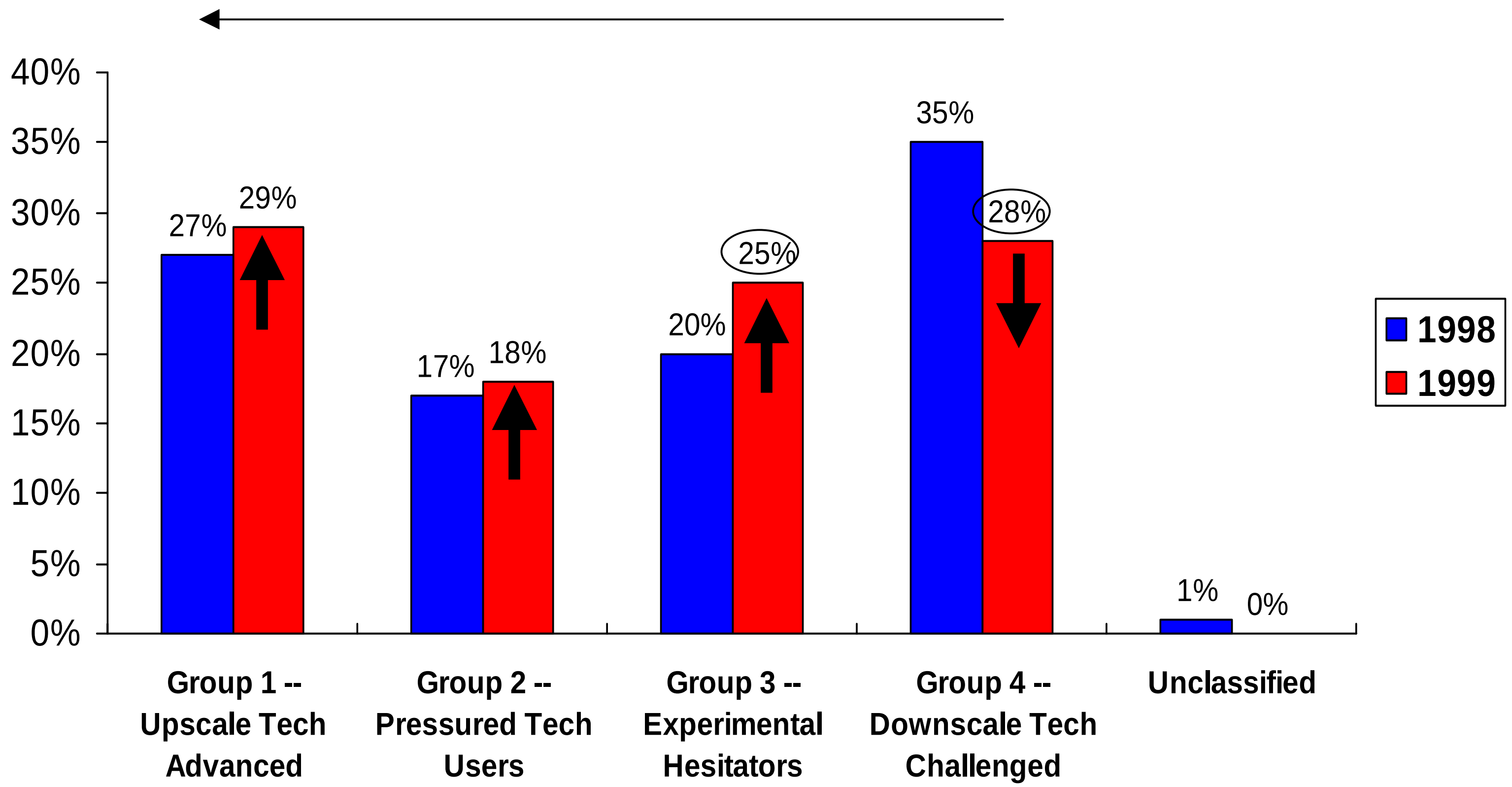
2. **ETA Product Awareness & Usage**: Although this study is not used for ETA product tracking, it does include a module of product awareness, usage, and consideration that serves as a point of analysis. This year, the awareness and usage measures showed significant increases in mentions of ETA products -- although the ETA gains were driven largely by the On-Line Filing method.

3. **ETA Product Consideration**: Although only 20% of Taxpayers in this study said they used any of the electronic methods in the past tax year, the potential for usage of these products is far higher.

   - A net of 80% of Taxpayers said they would consider using one of the three methods -- with Third Party the leader at 57%, followed by On-Line Filing at 49%, and TeleFile at 43%. The ETA gains in consideration were again higher in the West than in other regions.

Conclusions (Cont'd.)

4. **<u>The Market Segmentation</u>**: Post-classifying this year's respondents into a modified version of the segmentation model used in 1998, we found that our four cluster groups were changing in size, with significant movement out of the least-technologically oriented of the segments and into the more tech-forward groups.



Conclusions (Cont'd.)

4. **The Market Segmentation** (Cont'd.)

- As evident in looking across their labels, these four groups exist along a rough continuum from tech-leader---to---tech-follower. This continuum also approximates the flow of the product adoption process, with the two tech leader segments resembling the "innovators" and "early adopters" of theory (and perhaps the "early mass market"), while the two tech follower segments resemble the "mass market" and "laggards".

Upscale Technologically Advanced	*Pressured Tech Users*	*Experimental Hesitators*	*Downscale Technology-Challenged*

- Two waves of research both clearly show that the two tech-forward segments offer the greatest *immediate* potential for ETA, because of their attitudes toward technology and their awareness of and consideration of ETA products. However, there also appears to be near-term potential in a third group (the "Downscale Technology-Challenged") who might be moved into greater usage of electronic filing driven by a need for simpler returns and/or speedy refunds.

Appendix

Methodological Appendix

- Each wave of the study is conducted by telephone from RMR's national interviewing facility in Wayne, NJ .
- The 1999 wave was conducted during the period of March 8 to April 9, 1999.
- Each wave consists of a total of ~1,000 interviews (1005 in 1999). These interviews are allocated proportionally across the four IRS regions based on the number of Taxpayers in each region. Respondents are drawn from a computer-generated random digit dialing (RDD) sample of U.S. households. This type of sample assures that both listed and unlisted telephone households are included in the survey. Interviews are conducted during evening hours (5--9 p.m. in each time zone) and average 15 minutes each.
- To qualify for the study, Taxpayers had to be ages 18-64, employed, and must have filed taxes in the previous tax year (1998 for tax year 1997).
- To assure that the survey is representative of the national Taxpayer audience, a high rate of response is desired. The response rate in the 1999 wave was 62%, achieved via up to 10 attempts on each telephone number attempted.
- Data are weighted to reflect the previous year's tax filing patterns by filing method. However, the reported use of filing methods in the survey tends to be naturally close to actual patterns, so weights have only a very minor effect on data.

Technical Appendix: Updating The ETA Segmentation

- In the 1997 Benchmark Wave, a total of 59 items were included in the Cluster Analysis that is the foundation of the segmentation work in this project. These 59 items came from three question areas (Q1-attitudes toward technology, Q3-use of specific technologies, and Q9-psychographic self-ratings). While all were used in the segmentation, not all played a strong role in contributing to the distinction between segments.

- Needing to reduce the length of the 1998 interview (beyond the deletion of questions that were moved to the Satisfaction study), we looked to the 59 items for additional points to achieve cuts in interview length. The method used to find expendable items was Discriminant Function Analysis (DFA) -- a statistical technique that examines the original model and identifies the level of contribution of each item in that model in terms of discriminating among clusters/segments. To do this, we had to first go back to the 1998 segmentation data, apply the DFA to the original 59 items, then rank-order the items in terms of contribution (using a Wilks' Lambda score of .119 as the cut-off point). This procedure yielded a total of 14 possible items which might be eliminated.

- However, before removing these items from the model, we had to apply the modified model to the 1998 data to determine the degree to which the modified model (consisting of the remaining 45 items) correctly classified 1998 respondents into the same four original segments. We found that the modified model correctly classified people into original segments at a rate of 87.6% -- which statisticians considered a very high rate of post-classification.

- Finally, we applied the modified model to the new 1999 data, which yielded the same segments -- though of different sizes naturally, since attitudes and behavior change over time.

Questionnaire Used In 1999 Wave
Of ETA Attitudinal Tracking